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Citation for final published version:

Baker, Carly 2023. Humane dog food? caring and killing in the certified humane dog food value chain. Environment and Planning E: Nature and Space
10.1177/25148486231165457 file

Publishers page: <https://doi.org/10.1177/25148486231165457>

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Humane dog food? caring and killing in the certified humane dog food value chain

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Abstract

The marketing of dog food influences pet-owners to nurture the ‘carnivorous’ nature of the dog, keeping animal-based protein central to the industry (Wrye, 2015). Alas, dog food has a significant impact on welfare. Consumers are aware of this impact, shifting the industry towards alternative pet food movements such as Open Farm, the first certified humane food. This article examines the material and discursive practices through which ‘humaneness’ is constituted as a quality within the humane pet food supply chain and how it reinforces embedded animal hierarchies. By reviewing the marketing and history of commercial dog food production, I show how ‘caring’ for the carnivorous dog lays the framework for killing. I use Open Farm’s transparency tool to trace the value chain and compare it with the imagery, discursive claims, and the material practices found within the Global Animal Partnership (GAP) standards. I argue that instead of questioning animal-based protein, humane certification creates an alternative in which the pet owner could still ‘care’ for the wildness of their domesticated dog while simultaneously ‘caring’ for farmed animals. Thus, it reinforces the hierarchies of the industry. Additionally, the validity of the humane claims depends on the animals’ charisma and proximity to humans. In other words, marketing in the humane dog food supply chain creates animal-animal positionalities, in which the animals’ care or killability is mediated through the humans’ supply chain and marketing. However, as I show with interview data, the hierarchies are fragile and must be continuously reinforced, as animals can slip into different positions. Their proximity to humans alters their positionality and their killability.

Highlights

- Entanglements with the meat industry, discourses of ‘caring’ for the carnivorous dog, and ideas about nutrition lay the framework for killing of non-pet animals
- Certified humane pet food reinforces animal hierarchies and killability through misrepresentations of the concept of ‘humaneness’ and transparency
- The killability of non-pet animals depends on their charisma and sustainability as perceived by humans
- Animals exert agency and hierarchies of killability are malleable

Introduction:

Pet food has a significant environmental and social impact that continues to evolve as pet-ownership increases, the socio-economic position of pet-guardians develops, and pets - particularly dogs - are increasingly seen as 'family members' (Haraway, 2008; Hobbs and Shonya, 2018; Nast, 2006a, 2006b; Okin, 2017). While pets become a part of the family, pet food brands are marketing to pet-owners that the best way to care for the dog is to nurture their 'wild' and 'carnivorous' nature, keeping animal-based protein central to the pet food industry (Wrye, 2015). Animal-based protein is the first and primary ingredient in most pet foods, with some super premium and premium pet foods comprised of up to 80% animal ingredients. Animal agriculture has played a role in the centralization of animal-based protein in pet food: the farmed animals must be positioned as killable - in contrast to the family dog - to sustain the commercial pet food industry as is, which was built out of the meat industry.

Premium pet food consumers in the United States are aware of the impacts and are increasingly concerned about food animal welfare and food safety in pet foods, especially following mass recalls in which the FDA failed to regulate (Nestle 2008). This caused a shift in the pet food industry, giving rise to alternative pet food movements (APFM), in which brands advertise qualities of alternative food movements (AFM) such as such as superior nutrition, sustainability, and humane handling of animals (Galt, 2017; Nestle, 2008). This article analyzes the marketing and supply chain of APFM, specifically, the first US-based certified humane and sustainable dog food, Open Farm. Open Farm's motto that "the simple idea that pet food can both be good for your pet, and do some good for farmed animals and the environment, all at the same time" (Open Farm, 2022, 'About Us') reflects the shift in the US pet food industry which tries to balance nutrition, welfare, and sustainability - often in the form of high quality and 'responsibly' sourced animal-based protein. In addition to analyzing the global supply chain marketing of Open Farm, I also utilize interviews with supply chain actors in a small-scale APFM. Certified humane dog food undertakes production practices that purportedly allow consumers to 'care' for farmed animals killed for food, albeit from a distance, and thereby allow consumers to 'care' for their pet dogs through the provision of premium nutrition. However, the farmed animal is still killed for consumption by the dog (and humans).

Ideas about biological need stemming from nutrition science and from the pet food industry suggest that the dog needs meat to thrive; yet meat necessitates killing and has significant impacts on sustainability, animal welfare, and at times pet health. I argue that certified humane dog food attempts to alleviate the contradiction of caring for and killing animals that welfare-oriented consumers face when electing a nutritious diet for their 'carnivorous' dog. However, rather than

dissolving the contradiction, humane certification reinforces existing hierarchies of care and killability. While the hierarchy between human-pet-farmed animal has been noted elsewhere (Arluke and Sanders, 1996), I expand by demonstrating that – in addition to killability – the validity of humane claim, even between farmed animals, depends on the animals’ relationship to the human. These hierarchies collectively make some animals more killable based on humans’ perception of the animals’ proximity and charisma (Hovorka, 2019). In other words, marketing in the humane dog food supply chain creates what Alice Hovorka (2019) calls animal-animal positionalities, in which the animals’ care or killability is mediated through the humans’ supply chain and marketing. However, as I show in section five, hierarchies are fragile and must be continuously reinforced, as animals can slip into different positions. Their proximity to humans alters their positionality and their killability.

The article is organized as follows. First, I provide a methodological review and conceptual framework. Then, by reviewing the marketing of premium nutrition and the history of commercial dog food production, I show how ‘caring’ for the carnivorous dog and ideas about nutrition lay the framework for killing, even for consumers that consider themselves to be vegetarians (Gibbs, 2020; Wrye, 2015). The discourse stems from biological necessity for protein but also from industry: because commercial pet food developed as a by-product of animal agriculture, hierarchies and animal-based protein are embedded in the pet food industry. In the third section, I use Open Farm’s transparency tool and compare it to the supply chain I personally traced. I also compare the imagery and discursive claims on the websites with the material practices found within the Global Animal Partnership (GAP) standards. I conclude that certified humane dog food creates a structure in which it is okay to feed animal-based protein because of claims of humaneness and transparency; however, the claims are misrepresentations of the GAP standards and the animals are still killed. Additionally, the concept of certified humane reinforces that dogs need meat and that traditional farming is inhumane, without questioning the logic of humane killing. Fourth, using the standards and representations of sheep, chicken, and fish, I demonstrate that their killability and level of humaneness they receive depends on their charisma and sustainability as perceived by humans, or their animal-animal positionalities (Hovorka, 2019). Finally, by interviewing a small-scale farmer, I highlight on a micro-level that the positionalities are malleable based on individual animals’ agency. This demonstrates that hierarchies are unstable and must be continuously reinforced, which is achieved in the global scale of pet food marketing. Understanding the fragility of the hierarchies and thinking through positionalities might alter how we relate to nonhuman animals.

Tracing the certified humane value chain

2.1 Methodological approach

This article examines the material and discursive practices through which ‘humaneness’ and care are constituted as a quality within the certified humane pet food value chain in the United States. Also, I distinguish the different ways that animals are made killable in the certified humane dog food supply chain, even if marketed as a form of care. The worthiness of care or killability of an animal is based on its position to other animals as understood by humans, which varies based on proximity, charisma, and scale (Hovorka, 2019). I start at the multi-organizational scale to trace the pet food supply chain and show the embeddedness of the pet-farmed animal hierarchy within it. Then, I narrow down to the scale of a commercial company to demonstrate the representation of farmed animals in its’ marketing and the level of care an animal might receive. Lastly, I focus on a small-scale farm local to Western Washington to de-stabilize hierarchical assumptions of the global.

I first gathered data on the material practices within the value chain by tracing the history of modern dog food (Kelly, 2012; Nestle, 2008). I then selecting a bag of Open Farm kibble and tracing the animal-based ingredients using the transparency tool on their website. The transparency tool is unique to Open Farm and provides consumers with the geographic origins of the ingredients with the lot number on the package. It also supports Open Farm’s claim of humaneness by establishing trust with the consumer, which in local and AFM, relies on direct personal contact (Watts et al., 2018). Because the consumer cannot know the farmer providing ingredients for most kibbles, the transparency tool offers a sense of connection with the farmer and the animal vis-à-vis the company’s contact (Cole, 2011; Dutkiewicz, 2018).

As I discuss in section 4.1, the tool does not offer full transparency, but rather a curated transparency. The list generated gave me state names, not farm names, so I filled in the gaps by contacting Open Farm as a consumer to enquire about farm names. They were unable to provide any chicken farm names, so I used the lists of all certified farms on humane certification websites to identify the names and websites of the farms based on the location generated by the ingredient list.

To collect data on the living conditions of the animals, I reviewed GAP standards and the data and images from the “Better Chicken Project¹” (Mandell et al., 2020) to compare with the discursive practices of the sector. Both offered a look into the ‘reality’ of life on the farm, which appears different than the representation in the website imagery. Next, I focused primarily on

¹ The Better Chicken Project “brings scientists, breeding companies, chicken producers, buyers, and animal welfare advocates together ... to establish a research-based framework for reinventing the modern-day broiler chicken” (GAP, 2021: ‘Better Chicken Project’).

website content to highlight the differences in claims of humaneness based on the animal. This was done on Open Farm's ethical sourcing page, which highlights each animals' humaneness profile. Finally, I spoke to a small-scale butcher, who cares for and kills animals. While there are limitations to this final method given the small quantity of one interview, the complexity of emotion felt towards animals reflects the contradictions that created the foundation for the emergence of certified humane pet food and APFM. Unlike the content I analyze in the first part of the paper in which animals are in fixed positions, the interview destabilizes this.

2.2 GAP and Open Farm definitions of humane

Currently in the United States, only two laws cover the handling of farmed animals – which only pertain to handling at the time of slaughter – with problems including the continuous failure of the USDA in regulating and the exemption of poultry from the laws (Friedrich 2015; Spain et al. 2018). GAP and humane certification aim to remedy the lack of regulation with standards which are basic requirements for handling animals in other places, such as the United Kingdom and Australia. Humane certification refers to the humane practices of the farmers, slaughterhouse workers, manufacturers, and producers when they are handling the animals. The standards of Global Animal Partnership (GAP) define humane handling of animals as tending to the animals' health and productivity, natural living, and emotional wellbeing (August 6, 2022: 'Program Overview'). The infographic that summarizes the standards includes outdoor access, space requirements, enrichment, light and dark hours, and transport time. GAP uses a "tiered labeling strategy" in which a higher number on the label means that the animals' environment was closer to mimicking the animals' "natural environment" (GAP, August 2022: 'Standards Overview'). Level 1 is base certification and level 5+ means the animal lived its entire life on the farm.

Open Farm defines humane dog food as nutritious for the dog, sustainable, and transparent, sourcing "better meat from better places" (Open Farm, 2022: 'Transparency'). Open Farm goes to "great lengths to source the world's best ingredients" to provide the best nutrition, which includes sourcing certified humane meat (Open Farm, June 2021: 'Premium nutrition'). Humane handling of the animals used as ingredients is verified by a third-party organization, GAP. Open Farm declares a sustainable supply chain by reducing and offsetting their production emissions. Finally, They address food safety concerns with the transparency tool: consumers can be reassured there is no "mystery meat" (Open Farm, 2022: 'Our Mission'). In other words, the humane certified seal on dog food, or 'humaneness', signals these four qualities that consumers desire *and* contributes to narratives and hierarchies of caring and killing.

2.3 Bring pets and their food into food geographies

While there is extensive research on alternative food movements and animal agriculture for human consumption, there has been less research around pets and their food, which have significant global environmental and social impacts (Okin, 2017; Wrye, 2015). Jen Wrye (2015:102) noted this gap in the literature and made a critical intervention into the existing literature on pet food with her research on nutrition, which I discuss later in the article. Importantly, Wrye states, “pets and their food aren't typical objects of critical analysis. Mostly pet foods are invisible products that scarcely catch consumers' attention. Yet industries dedicated to living with companion animals are enormously profitable”. This article makes an intervention into alternative food geographies, utilizing critical animal studies and critical pet studies to highlight the importance of research on pet food because of these impacts. Additionally, it contributes to literature on pet food that primarily examines nutrition (Buff et al., 2014; Nestle, 2008), sustainability (Alexander et al., 2020; De Silva and Turchini, 2008; Okin, 2017), pet food as a by-product of the meat industry (Castrica et al.2018; Pirsich and Theuvsen, 2017), and consumer behaviors and understandings of dog food (Dodd et al.,2020; Heinze, n.d.; Higa et al., 2021; Kamleh et al., 2020; Rombach and Dean, 2021; Rothergerber, 2013).

There has been considerable work within food geographies on commodity chain analyses (Cook and Crang, 1996; Guthman, 2004; Hartwick, 1998; Watts et al., 2005), critiques of consumption within AFM (Galt, 2017; Guthman, 2008; McClintock, 2018; Slocum, 2007), and critical analysis of certifications (Evans and Miele, 2019; Friedrich, 2015; Guthman, 2004; Mutersbaugh, 2005; Schreck et al., 2006; Spain et al., 2018; Stanescu, 2013). APFM value chains overlap with AFM materially and discursively (Castrica et al.2018; Nestle, 2008; Pirsich and Theuvsen, 2017), yet have not been a significant focus in food geographies. Tracing the value chain of certified humane dog food evaluates what the APFM and premium pet food sector is telling us about commodity chains and consumption of AFM, especially regarding meat consumption in a movement concerned with animal welfare and sustainability.

Critical animal scholars contributed to food geographies by arguing that certified ‘humane’ practices do not do enough to challenge the idea that nonhumans are food, but rather naturalize the killability of animals by making it less oppressive (Arcari, 2017b; Belcourt, 2015). Killability is the act of making a being killable, or “the capacity to decide which bodies can be killed without the killing counting either as homicide or as a sacrifice” (Singh and Dave, 2015: 232). Animals’ killability is maintained through food (Arcari, 2017a; Belcourt, 2015; Stanescu, 2013), conservation (Atchison et al., 2017; Crowley et. al, 2018; Parreñas, 2018; Srinivasan, 2014 and 2019), disease prevention (Holloway et al., 2022; Power et al., 2021), indirectly through climate change (Gibbs, 2020; Stanescu

2010), co-opted in response to global problems, and lab testing. The certified humane dog food value chain primarily highlights how killability is maintained through food. In this case, animals are made killable through canine nutrition and the human-dog bond, curated transparency of the supply chain, and imagery of the animals 'living the good life' (Cole, 2011; Dutkiewicz, 2018; Gillespie, 2011). However, it also goes beyond end of life to show how animals receive different levels of care while alive, contributing to literature on hierarchies and animal-animal positionalities.

Additionally, this paper contributes to the emerging field of critical pet studies by extending existing literature and theories on animal geographies and hierarchies to pets and their food (Arcari et al., 2021; Arluke and Sanders, 1996; Collard and Dempsey, 2013; Hovorka, 2019; Gibbs, 2020; Lorimer, 2007; Nast, 2006a). Specifically, I tie together recent progress reports by Alice Hovorka (2019) and Leah Gibbs (2020) on animal positionalities and on caring and killing. Caring for dogs necessitates violence because they are understood as carnivores, creating a hierarchy of pets to farmed animals and additional hierarchies between farmed animal species and the wildlife intertwined in the Open Farm supply chain (Wrye, 2015). As a result of humans making animals killable, hierarchies are produced that have consequences for animal-animal interactions. Alice Hovorka calls these animal-animal positionalities, or the "relative power held by various animal groups, as expressed in their circumstances and experiences and as mediated through human-animal dynamics" (Hovorka, 2019: 749). Animal-animal positionalities illuminate "how animal social groups are bound up with humans, as well as with other animals, in ways that produce and reproduce species-based differences and inequalities" (Hovorka, 2019: 749). The power of animal groups is a result of the aesthetics, "relational value, utility, and roles in human societies" (Hovorka, 2019: 749) which I refer to in this article as charisma and proximity to humans. Some animals are more familiar and therefore charismatic to humans, especially creatures with eyes, a face, or other familiar attributes to humans, generating an increased affective response (Lorimer, 2007, n.d.). The animals that evoke a stronger emotional response are seen to have more charisma than others, such as cows versus chickens (Lorimer, 2007, n.d.). Said differently, "charisma helps explain how and why some animals appeal to humans while other animals do not" (Hovorka, 2019: 753). Seeing animals through the lens of animal-animal positionalities unsettles a fixed position in dominant hierarchies.

2.4 Why do pets matter?

The research on pets within critical animal studies has focused primarily on the human-animal bond, which makes sense given their role in society (Haraway, 2008; Irvine, 2013; Gillespie and Lawson, 2017; see also Arcari et al., 2021; Nast, 2006a). The contemporary configuration of the dog-human relationships mimics a parent-child dynamic: the dog is mostly dependent on the human, providing love and affection, and the human cares for the dog by meeting and exceeding the

dogs' needs (Haraway, 2008; Holbrook, 2008; Nast, 2006b). Heidi Nast (2006b) attributes the familial and affective relationship between pets and humans to the alienation that stems from post-industrial capitalism, especially in higher economic classes. She states that pet-love is facilitated by erosion of long-term communities and family size, "elite footlooseness" (Nast, 2006b: 304; see also Rosa, 2010), and the resulting physical and emotional distance between humans. Pets, especially dogs, are settling in as family members, filling the void that was once filled with human connection, even earning the status of citizen in parts of Europe (Fortune Business Insights, 2022; Haraway, 2008; Nast, 2006; Spain, 2018). Because humans are increasingly seeing themselves as 'pet parents' to dogs, financially privileged consumers want to feed their pet as they would feed their family and they are willing to invest a lot of money in their care (Holbrook, 2008; Nast, 2006b). The desire to exceed the dog's needs as a reciprocal form of care creates an opportunity for value extraction, particularly a niche market for premium pet food (Holbrook, 2008; Nast, 2006b).

At the same time, the 'darker side' of pets is neglected (Arcari et al., 2021). Pet love and pets are seen as innocent and necessary and therefore considerable resources are invested into the pet-human relationship, including efforts to stop animal cruelty and 'save' dogs from kill shelters (Nast, 2006a). Heidi Nast (2006a) argues that this innocence of pets diverts attention away from non-innocent processes like a crumbling health care system, an increasing wealth gap, and human-human violence. While human-human violence is not central to this article, I do extend this argument to other animal-animal relationships. That is, the innocence and non-violence towards pets distracts from the non-innocence and violent relationships we have with other nonhuman animals. A stronger bond between the dog and the human results in an increased desire to feed a pet premium or super-premium pet food, which generally contain a higher percentage of animal-based ingredients than non-premium food (Pirsich and Theuvsen, 2017; Rombach and Dean, 2021). The intimate dog-human bond alters and reinforces distant human-animal relations resulting in collective killing for the individual bond in the form of pet food (Gibbs, 2020).

Wild dog in the home: recruitment of consumers in meat production

It is generally understood in the pet industry that the domestic dog needs meat. This understanding comes from an evolutionary standpoint and a biological need for protein, and therefore consumer desire, but it also comes from the development and marketing of commercial dog foods for financial gain from animal agriculture by-products. Consequently, farmed animals became embedded in the pet food industry as ingredients. They are killable because they service the purpose of sustaining our intimate relation with our charismatic dogs.

3.1 Entanglements with the meat industry

It is profitable to maintain farmed animals as they key ingredient in pet food, and therefore the industry is invested in keeping commercial pet foods in every pet owner's pantry. Historically, kibble became a staple in many dogs' diets to utilize and profit off the by-products from the meat industry and industrialized agriculture (Kelly, 2012; Nestle, 2008). Still, the use and sale of by-products from the factory farm industry for other purposes – such as dog food – is economically vital to animal agriculture (Pachirat, 2011). The marketing of commercial pet foods was successful: a majority of pets eat commercial pet foods, and the global pet food industry is valued at \$110 billion US dollars (Fortune Business Insights, 2022). Consequently, the global pet food industry accumulates value from the human-dog relationship *and* actively enrolls consumers to participate in the meat industry, facilitating the killability of farmed animals to care for their dog.

To keep animal-based protein central, many brands in the premium pet food industry emphasize the protein requirements, which necessitates the killing of animals to obtain animal-based protein for high-quality nutrition (Wrye, 2015). For example, on their premium nutrition page, Open Farm claims that “dogs and cats thrive on quality protein, and quality protein starts with the animals, farms and fisheries it's sourced from” (Open Farm, Sept. 2022: 'Premium Nutrition'). A significant portion of consumer understanding about premium nutrition comes from marketing in the pet food industry (Rombach and Dean, 2021). In a study of pet owners' attitudes towards nutrition, the results showed that pet food packaging was the third leading factor in consumer decisions about which pet food to feed, behind veterinarian recommendations and online information (Kamleh et al., 2020). Given consumer reliance on marketing as knowledge, the centralization of animal-based protein keeps farmed animals killable to care for pet dogs.

Although there has been a shift to APFM, this does not necessarily mean an improvement for farmed animals or sustainability goals. In 2007, massive pet food recalls sparked widespread distrust after commercial pet foods caused mysterious illness and deaths (Nestle, 2008). The pet food recall ignited a major shift in the pet food industry and consumers sought out alternative pet foods (Carter et al., 2013; Nestle, 2008; Schlesinger and Joffe, 2011). Traditional pet food sales dropped 20% but the sale of premium pet foods rose 69%, which generally contain higher quantities of meat (Liu and Fangqing, 2007). Although recruitment has shifted to feeding premium kibble, the commercial pet food industry and meat industry remain interdependent. By-products of the meat-for-human-consumption industry still form the base for the premium pet food industry, except now, by-products are re-labeled as 'whole prey'. Recent literature (Pirsich and Theuvsen, 2017) describes pet food as the ideal outlet for by-products to keep humanely handled meat prices low (and therefore the industry sustained). In the context of APFM that seek sustainability and welfare,

farmed animals must be maintained as killable *and necessary* to sustain the meat and immensely profitable pet food industry, which is supplemented with framing the domestic as carnivorous.

3.2 Advertising the domestic dog as wild

In the marketing of premium pet food, domesticated dogs are discursively maintained as wild carnivores who require meat. Kay Anderson (1997:464) describes domestication as “a process of drawing animals into a nexus of human concern where humans and animals become mutually accustomed to conditions and terms laid out by humans; where that which is culturally defined as nature's ‘wildness’ is brought in and nurtured in some guises, exploited in other guises”. In research originally done by Jen Wrye in 2015 (109), she found that pet foods nurture pets' wildness by portraying them as predators - or “never truly tame” - naturalizing the intense production of food animals. The visceral experience of the dog, or rather the instinct they cannot control, maintains a logic that animals must be killed to placate the wild dog. Open Farm's marketing is not as thick with the wild dog discourse, but they do use the term “whole-prey” to describe their animal-based ingredients which implies that the domesticated dog still has hunting instincts. A whole prey diet for dogs is a diet that is designed to resemble the natural diet of wild dogs as closely as possible consisting of meat, organs, and bones (Dog Food Guru, 2014). In this case, their ‘wildness’ is being nurtured in nutrition and subsequently exploited as a marketing tool that creates the conditions for the killability of other animals and producing knowledge of what the dog needs. Humans make it possible for the dogs to enjoy their wildness.

This creates a contradiction for dog food purchasers who are generally more concerned about animal welfare than the general population (Pirsich and Theuvsen, 2017): caring for their dog and being a ‘responsible’ pet owner means killing distant beings. Not feeding meat is understood to compromise the wellbeing of the dog while feeding meat jeopardizes the wellbeing of the farmed animal and the health of the environment (Rothgerber, 2013). Pet owners, particularly vegetarians and vegans, express ethical concerns of both feeding meat to their dog and not feeding meat to their dog, making humane certified dog food even more appealing for the industry (Rothgerber, 2013). At the same time, the dog's *requirement* for meat removes the human as an agent of killing as they fill their role of being a ‘responsible’ pet owner (Wrye, 2015:109). Ultimately, the dogs' needs are prioritized by the consumer, who is highly involved in the relationship with their dog, and farmed animals are ‘necessarily’ used as ingredients (Rombach and Dean, 2021).

However, the dog is not a carnivore: it is a domesticated omnivore that is in the *carnivora* family along with other omnivores such as raccoons and bears (Heinze, n.d.). The French Bulldog with the birthday hat on the homepage of the Open Farm website would have an incredibly hard

time catching and killing prey due to its likely exercise intolerance and brachycephalic head (figure 1; Allan, 2010). In fact, the French Bulldog, like many breeds, has been developed to meet the desires of the human at the cost of its health (Allan, 2010). Genetically, dogs' digestive systems have evolved as well. A study done in 2013 comparing the dog genome to that of wolves indicated that one of the primary genetic differences between them is the ability to digest starches, which was a crucial step in domestication (Axelsson et al., 2013). Additionally, pet food products contain well above the minimum protein requirements. According to the Association of American Feed Control Officials (AAFCO, 2015), dogs have a minimum requirement of 45 grams of protein per 1000 calories of kibble, yet Open Farm 'turkey and chicken' contains 86 grams per 1000 calories. Even though dogs do not need this much animal-based protein, the information coming from the premium pet food industry argues that this is the best thing for the dog. The more animal-based protein, the more animals that need to be made killable. The pet food industry is actively constructing farmed animals as killable to provide dogs with premium nutrition, which stems from a pets' 'love' and charisma, profit, and consumer desire rather than biological necessity.

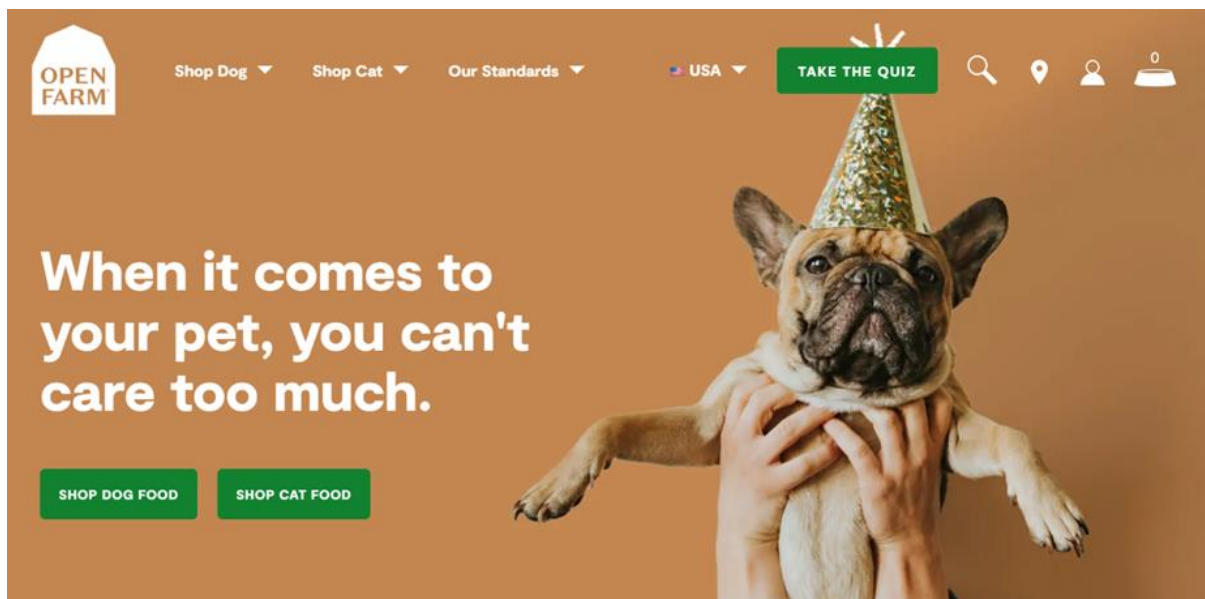


Figure 1: Banner on the homepage of Open Farm (screenshot February 2022)

'Proving' humaneness: transparency and imagery

Certified humane dog food permits consumers concerned with ethics can continue to feed their pets meat because it is the process of killing that is unethical (Haraway, 2008), and humanely handled animals are perceived to support family farms, happy lives, and premium nutrition for dogs (Open Farm, 2022: 'Premium Nutrition'). For certification to establish trust with the consumer, the seal must be backed with narratives that reflect the qualities represented (Cook and Crang, 1996;

Watts et al., 2005). The primary narratives in the certified humane dog food chain include transparency and the images of happy, charismatic animals. These discursive practices facilitate the killing of farmed animals because they ‘prove’ humaneness. Transparency and imagery seek to allow consumers to ‘see’ the humane raising of the animals, providing the consumer an illusory proximity to the animal so they can care for it. At the same time, the images and transparent supply chain are misrepresentations of the material practices, creating another contradiction. Caring for the dog by killing animals humanely does not equate to caring for the farmed animal.

4.1 Transparency: “better meat from a better place”

Awareness of the provenance of the farmed animal they will be (indirectly) consuming is important in consumers’ purchasing decisions and trust (Watts et al., 2018). Provenance is proven through supply chain transparency which is supported through labeling, vendor knowledge, farmer relationships, and visual inspection (Watts et al., 2018). Visual inspection and farmer relationships are not available with Open Farm kibble because it is in kibble form, not meat or the living animal, and consumers are not purchasing the kibble directly from farmers. Instead, Open Farm claims that they do the visual inspection and develop relationships with the farmers on behalf of the consumer with statements such as “ [we are] 100% obsessed with the standard of every ingredient” and “[we] overdo it on the details” (Open Farm, July 2022: ‘Transparency’). To enable the consumers to “to view the animals on the farm and see that they are well looked after” (Watts et al., 2018: 7, my emphasis), Open Farm offers the transparency tool so consumers can “trace every ingredient back to its source” (Open Farm, July 2022: ‘Transparency’). If the consumers can see that the farmed animals are well taken care of throughout their life, killing them to feed their pet becomes acceptable.

The transparency tool and Open Farm’s language of obsessing over their ingredient quality and origin does not necessarily match up, but rather is “curated transparency” that provides more *comfort* than it does *information* (Dutkiewicz, 2018). During my research, I randomly selected a bag of chicken-based kibble to trace. The generated list from the lot number stated that the chicken came from Pennsylvania. When I contacted Open Farm, they provided names of sheep and pig farms, but were unable to identify any chicken farms – which correlates with the animals’ charisma which I discuss in the next section. Wanting more detail, I browsed all 296 farms on the certified humane website and found one chicken farm in Pennsylvania, Murray’s Chicken. The meat industry is notoriously suspicious of researchers, and I received no response in my attempts to contact Murray’s Chicken to see if they provide chicken for Open Farm. Even though Open Farm tries to make the supply chain for meat consumption clear, it is still muddy. A truly transparent supply chain would ideally know the names of the farms for all farmed animals.

4.2 The natural place of animals: images of the farm

Trust in transparency is conditional - consumers may not buy the product if they are unsatisfied with some aspect of the APFM (Watts et al., 2018). For this reason, Open Farm backs their transparency tool with images of happy animals. Unlike faceless factory farmed animals that are absent from the advertisement of other non-certified kibble, Open Farm includes images of the living forms of the ingredients appearing 'happy' on pastures, as seen below in figure 3 of the chickens grazing during the 'golden hour' of the day. The warmth of the photo changes creates a calm and cheerful mood unlike the image on the left in which the chickens are surrounded by grey walls establishing a somber mood. The image on the left (figure 2) is taken from the "Better Chicken Project" (Mandell et al., 2020) report and is meant to mimic the actual living conditions of the chickens. As Singh and Dave (2015) argue, the mood of killing matters: the warmth in the images implies softness and wellbeing and that humans can know what nonhumans feel (Cole, 2011; Despret et al., 2016; Miele, 2011). Therefore, because consumers cannot see the spaces of production (Muttersbaugh, 2005), they rely on the photos to trust that the animals lived a good life, putting the consumer at ease about their pets' consumption of animals and giving them a sense of caring for the living farmed animal.



Figure 2: The image on the left is taken from the "Better Chicken Project" (Mandell et al., 2020).

Figure 3: screenshot of the Open Farm transparency page (2022).

However, the standards of humane handling are misrepresented and the images of chickens in fields do not actually represent the conditions permitted by the standards. For example, chickens do not require any daily outdoor access until step four. Inside, chickens have a "maximum stocking

density” of six pounds per square foot (GAP Standards, 2022: 4.6.2) with one enrichment² per 1,000 square feet (GAP Standard, 2022: 4.8.5). The target weight for the chicken at slaughter is seven pounds, which means that chickens must only have a minimum of roughly one square foot per bird and there could be up to 1,000 birds for every one enrichment item (Mandell et al., 2020). Since GAP defines access to enrichment as a key aspect of animal welfare and humane handling, even when the guidelines require better living conditions, it is not guaranteed that it will be achieved due to the ratio of bird-to-enrichment item. Finally, during this research in August 2021, undercover footage of one GAP facility – Plainville Farms – showed turkeys being kicked, beaten with rods, and stomped on while being loaded up for slaughter (PETA, 2021). So even though GAP audits every farm every 15 months and claims humane handling, there is plenty of time and lack of oversight to prevent cruelty from happening in places where animals are made killable.

Not only is it a misrepresentation of conditions, but welfare science also has inadequate tools for measuring happiness (Miele, 2011). GAP’s evaluation of animal welfare for the ‘Better Chicken’ project was based on the absence of pain instead of perceived happiness. In their methods section Mandell et. al (2020) state:

We studied the broilers’ welfare by considering whether they might be experiencing pain or poor health, and whether they can perform motivated behaviour. We examined the potential for pain indirectly through the birds’ general behaviour and activity levels, through tests of mobility and through the presence of painful footpad lesions and hock burns... Time spent sitting, standing and walking can be an important welfare indicator if differences relate to a bird’s inability to stand and walk, or if differences increase the birds’ risk for contact dermatitis (footpad lesions and hock burns).

GAP’s definition of motivated behavior is the motivation to jump over a bar to reach food and water. One might argue that the desire and the ability to walk around is a basic need for life and the absence of physical pain does not equal happiness. Moreover, the study found that 77% of conventional broiler chickens and 40% of fast-growing chickens experienced myopathy, or diseases of the muscle which “may limit the fastest growing strains from accessing important resources” (Mandell et al., 2020). GAP’s step 1-3 standards allow for both fast-growing and conventional chickens, with six out of twenty-seven breeds falling in the conventional category and ten within the fast category. Only steps 4-5 require that the birds be able to perch their entire lives (GAP Standard, 2022: 1.1.4). Even if the farm offers a free-range or ‘humane’ environment, it does not necessarily

² GAP standards permit a bale of hay or straw, spreading whole grains, insects, perches, hanging plants, boxes, ramps, tunnels, string, or edible pecking blocks

mean that the animal can interact with it because GAP standards still permit fast/conventional chickens that experience a high percentage of myopathy and inactivity.

Humane handling practices perpetuate the killability of farmed animals because it obscures the killing. Kathryn Gillespie (2011: 101) calls this an “aesthetic disconnection” in which the marketing of humane dog food uses “discursive strategies to advocate connection to animal lives, while actively obscuring animal deaths.” Slaughter, culls, and on-farm deaths are not included in the animated and colored ‘standards overview’ chart on the GAP website. Slaughter is the final topic in the standards book, not appearing until page 38 out of 39 pages of standards. When slaughter is mentioned, it is deemed acceptable because the rules, technology, skills, and respect make it a “good death” (Higgin et al., 2011).

In other words, humane handling makes meat psychologically edible through emotional connection, the construction of transparency, and humaneness. Consumers have difficulties differentiating between their assumptions of welfare and the ‘science’ of welfare (Evans and Miele, 2019), and those that choose not to look any further than the images or label are led to believe that this is how the animals live. Because the consumers may believe that farmed animals are ‘living the good life’, it is therefore okay to feed them to their beloved dogs. Unlike dogs, *farmed animals’ domestication is used against them*. Animals are “grown for a purpose” and their dependency and happiness justifies their exploitation and sacrifice for humans and dogs (Haraway, 2008; Taylor, 2017). Humane certification still creates the conditions in which the dogs’ wellbeing is placed above the wellbeing of the farmed animals and the animals are still slaughtered.

Intra- and inter- farmed animal positionalities

Killability depends on an animals’ position to other animals depending on their relationship to humans and as mediated by the supply chain. This goes beyond pet and non-pet: some animals used as ingredients are more killable than others depending on their charisma. Moreover, its perceived charisma and sustainability influence the care an animal receives – or its quality of life – which I demonstrate with Open Farm’s marketing and GAP standards. An interview with David, owner of Best Buddy dog food, highlights how intimate relationships with animals, their charisma, and their agency influence how they are cared for and adjusts their positionality.

5.1 Killability in context of sustainability/sustainable killability?

“Not all proteins are created equal when it comes to environmental impact: [there are] differences between animal species, differences between parts of the animals sourced, [and] differences in the way the animals are raised” (Pet Sustainability Coalition, 2022: presentation).

The Pet Sustainability Coalition points out in this quote that some animals may be more killable because they are more sustainable. Within the marketing of Open Farm and its supply chain, this quote is enacted, and even influences the care the animal receives. For example, for the uncharismatic fish, Open Farm focuses on the sustainability of fishing practices, not fish welfare. They stated that 90% of “fish stocks” are overexploited and that four out of every ten fish caught is a by-catch. In this case, the welfare of the fish is shelved in favor of protection of the marine environment at large. There is no discussion of whether there are humane handling practices for fish when they are killed, and GAP only developed farmed fish standards within the last year.

For the more ‘charismatic’ animals, they talk about how the animals are raised, or in other words, ethical sourcing means good welfare. However, there is still a discrepancy in care based on the level of charisma of the animal. Sheep are understood to be more charismatic than chickens, in that they have more similar attributes to humans. As discussed, chickens raised at GAP step one or two – which is most chickens as of 2022 – still live in densely packed living conditions; meanwhile, 100% of the sheep farms certified by GAP are step four, which means that they are pasture-raised (GAP 2022). Open Farm was able to identify the sheep farms while the chicken farms remained unnamed. The difference of focus depending on the animal – whether it is welfare or sustainability – neglects the sentience of some animals and the environmental impacts of others in the certified humane dog food value chain.

Caring for the dog also means (indirectly) killing wildlife. With meat as the primary ingredient, pet food constitutes “about 25– 30% of the environmental impacts from [farm and meat] animal production in terms of the use of land, water, fossil fuel, phosphate, and biocides” and contributes to CO₂ and methane production (Okin 2017, 1). Yet, humane certified Open Farm does not mention the environmental impact of animal agriculture. Rather, they focus on reducing their carbon emissions through measuring, reducing, and offsetting emissions. Additionally, humane handling of animals can worsen the environmental impact and animals, such as pests or predators (even other canines), may be killed to protect free-range stock (GAP chicken standards, 2022; Stanescu, 2019). According to the Audubon Society (in Stanescu 2010), “free-range chickens have a 20 percent greater impact on global warming than conventionally raised broiler birds. That’s because —sustainable chickens take longer to raise and eat more feed.” Given that animal agriculture directly and indirectly affects wildlife and biodiversity through habitat loss and climate change, ‘caring’ for farmed animals still means killing others (Gibbs 2020, 3; Stanescu, 2013). So not only are humans choosing who gets to live or die in the domestic world, but they are also choosing who gets to live or die in terms of wildlife and biodiversity (Parreñas, 2018).

5.2 ‘Walking contradiction’: loving farmed animals

You know I had my first pet growing up as a pig. Her name is Howard and I saved her life and I raised her under a lamp in my room and then my dad was going to sell her as a Wiener pig. And I was like ‘no, no dad you can’t sell Howard!’ And then he was going to sell her as a butcher hog. And I was like ‘no, no dad you can’t sell Howard!’

And then we started raising piglets with her and she had the most beautiful litters, 16-18 piglets at a time. So, we would go to sell the piglets... She's a wonderful mom and so my other brothers would go in and grab the piglets. And I remember the walls shaking, she would get so mad and bust them and the walls would shake... and I would walk in that room and I would look at her and I grab a piglet and she wouldn't.

So not only did I love her, she loved me.

- Interview with David, Best Buddy pet foods (July 2021, personal communication)

David runs a small raw dog food company in Western Washington. He created Best Buddy pet food out of a love for his dog and economic necessity to keep the family butchering company afloat. David called himself a ‘walking contradiction’ because he loves animals and is enrolled in a system where beings are made killable (July 2021, personal communication). The stories he shared exemplified how animals can slip in and out of positions with other species and within their own species, even taking the status of pet when her original fate was to be a ‘wiener pig’. Mann Barua (2019) states that biographies matter – not all animals, or even dogs, are treated the same. Biographies are curated by humans but animals have agency to alter humans’ perception of them. As shown in this quote, Howard’s proximity to David and her charisma resulted in her living a longer – and arguably higher quality – life with the status of a dog.

Alice Hovorka states that “we must recognize that animals exert agency through their inherent charisma and relational engagements with various human and animal social groups” (2019:750). Beyond just reminiscing on Howard’s charisma and love, he also mentioned intentional manipulation, or agency, on behalf of a pig:

I have one sow I know she knows I’m a butcher. And she is so sweet and... she's skipped execution several times 'cause she is just so sweet. And we all love her. You know, now her litters are decreasing, which is a sign that she's on her way out, but she's so darn sweet you're not going to get rid of her.

In other words, she changed her position and her killability through her relationship with David, demonstrating the instability of hierarchies when approached from a more intimate scale. The malleability of the animals’ position on an intimate scale demonstrates that an animals’ killability must be reinforced through discourses of wild dogs and logic that farmed animals are naturally food. Put another way, the hierarchies established in the pet food industry and certified humane discourse relies on a binary way of thinking. Animal-animal positionalities may be a better way to imagine

relationships, rather than hierarchies, because it demonstrates the agency of the animal and therefore does not fix it in position.

Animal-animal positionalities also show how “bad animals are ranked lower on the ladder,” perceived as “real threats to the social order [therefore] they may be killed” (Hovorka, 2019: 752). As the conversation continued, David (July 2021) explained that animals that are dangerous, or not nice, get slaughtered first.

And it sounds terrible, but I have no time for animals that are going to put my farm workers at risk. I had a... sow and you know I had a routine when I wean animals... I put a big distance in between [the sow and the piglets] and then I put her in a cage. She had no business getting out, but she broke out of that pen and then she tore after my niece and that's it. You are going to die. And it wasn't personal, but I can't have unsafe animals.

While it seems that animals may not intentionally act in a way to change their ranking in the human hierarchy, they are certainly speaking their desires (Taylor, 2017). More than likely, the sow was worried about her piglets. He (July 2021) continues referring to his father's advice on his flock of sheep. He reflected on his father's advice, stating that there are “lots of nice animals out there to raise,” which reminds us that even the nice animals are still destined for slaughter. Killing still happens alongside love, and sometimes it is personality dependent.

Throughout his time farming, animals have changed their positionality based on their relationship to David, sometimes even obtaining the status of ‘pet’ or family member. While this complicates neat schemas and even my argument about killability and hierarchies, it also demonstrates that there are alternative ways of being that imagine a different relationship to nonhumans. Perhaps we are getting somewhere given that humane certification is at a minimum acknowledging that cruelty exists in our agricultural system.

6. Conclusion

By claiming the qualities of alternative food movements – such as personal relationships with farmers, sustainability, food safety, and welfare – Open Farm attracts anxious consumers concerned about their pets' health, sustainability, and animal welfare. Alternative pet food discourses, as I have shown, invite consumers to feel good in the face of food contamination, animal cruelty, and climate change.

As I argued in this article, the marketing of certified humane dog food value chain contains a series of contradictions. First, dog food is deeply entangled with the meat industry - hierarchies of killability are organized in the industry and embedded economic relations. The pet industry equates premium nutrition to high-quality animal-based protein. As a result, dog food marketing nurtures

the idea that the dog is carnivorous and therefore needs animal-based protein. However, the dog is not a carnivore, it is an omnivore. Second, pet food companies invite consumers to feel good about their purchases by advertising happy animals and transparency. This stems from an understanding that farming animals is not humane *and* that dogs need meat. Instead of questioning the root of the problems (animal-based protein as the primary ingredient in pet food), it created an alternative in which the pet owner could still 'care' for the wildness of their domesticated dog while simultaneously 'caring' for farmed animals. Yet, high-quality protein has a significant environmental impact and does not necessarily signify humane handling, even if the meat is certified humane (Alexander et al., 2020; Gillespie, 2011; Nestle, 2008; Okin, 2017; Stanescu, 2013). The discursive practices of transparency and imagery are misrepresentations of the material practices within the supply chain. Third, I demonstrated that animal-animal positionalities and killability are created and maintained in the Open Farm supply chain because they selectively highlight the wellbeing of some animals and the 'sustainability' of others. Animals deemed by humans to be more charismatic and non-threatening are prioritized. Finally, I complicated this argument and ideas of set hierarchies with David's experience as a butcher on a small-scale farm. Animals exert agency (if given the chance) and alter their position to both humans and other animals, demonstrating the fragility of hierarchies and their need to be constantly reproduced.

In this article I brought together literature from the biological and social sciences to analyze understudied discourses in pet food nutrition and marketing. In doing so, I confirm that the darker side of pets is indeed neglected (Arcari et al., 2021); and that value chain analysis offers important insights of how killability and meat consumption remain embedded even in AFM that strive for sustainability and animal welfare. I also highlight the importance of analysis of pet food to critical animal studies given that it relies on nonhuman hierarchies to function. While critical animal studies attempt to de-center the human, this article shows how the human is still central in cases where the instinct of the animals *seems* to be the key driver of animal-animal positionalities and apparently natural hierarchies (Hovorka, 2019). Or rather, what seems to be the 'natural order of life' in which the carnivore eats the herbivore is still facilitated by human ideas of the 'animal'.

Bibliography

- AAFCO Association of American Feed Control (2015) AAFCO METHODS FOR SUBSTANTIATING NUTRITIONAL ADEQUACY OF DOG AND CAT FOODS accessed February 14th at https://www.aafco.org/wp-content/uploads/2023/01/Model_Bills_and_Regulations_Agenda_Midyear_2015_Final_Attachment_A._Proposed_revisions_to_AAFCO_Nutrient_Profiles_PFC_Final_070214.pdf
- Alexander P, Berri A, Moran D, et al. (2020) The global environmental paw print of pet food. *Global Environmental Change* 65. Elsevier BV: 102153. DOI: [10.1016/j.gloenvcha.2020.102153](https://doi.org/10.1016/j.gloenvcha.2020.102153).

- Allan C (2010) Is the Quest for the 'Perfect' Dog Driving a Genetic Health Crisis?" *AllAnimals*, no. May/June (2010): 8
- Anderson K (1997) A walk on the wild side: a critical geography of domestication. *Progress in Human Geography* 21(4). SAGE Publications: 463–485. DOI: [10.1191/030913297673999021](https://doi.org/10.1191/030913297673999021).
- Appleby MC (2005) Sustainable Agriculture is Humane, Humane Agriculture is Sustainable. *Journal of Agricultural and Environmental Ethics* 18(3). Springer Science and Business Media LLC: 293–303. DOI: [10.1007/s10806-005-1490-9](https://doi.org/10.1007/s10806-005-1490-9).
- Arcari P (2017a) Normalised, human-centric discourses of meat and animals in climate change, sustainability and food security literature. *Agriculture and Human Values* 34(1). Springer Science and Business Media LLC: 69–86. DOI: [10.1007/s10460-016-9697-0](https://doi.org/10.1007/s10460-016-9697-0).
- Arcari P (2017b) Title: Perverse visibilities? Foregrounding non-human animals in 'ethical' and 'sustainable' meat consumption. *The Brock Review* 13(1). Brock University Library: 24–53. DOI: [10.26522/br.v13i1.1317](https://doi.org/10.26522/br.v13i1.1317).
- Arcari P, Probyn-Rapsey F and Singer H (2021) Where species don't meet: Invisibilized animals, urban nature and city limits. *Environment and Planning E: Nature and Space* 4(3): 940–965. DOI: [10.1177/2514848620939870](https://doi.org/10.1177/2514848620939870).
- Arluke A and Sanders C (1996) *Regarding Animals*. Animals, culture, and society. Philadelphia: Temple University Press.
- Arpita KS (2022) Spain passes new law to make pets legal family members. In: *BreezyScroll*. Available at: <https://www.breezyscroll.com/pets/spain-passes-new-law-to-make-pets-legal-family-members/> (accessed 21 January 2022).
- Atchison J, Gibbs L and Taylor E (2017) Killing Carp (*Cyprinus carpio*) as a Volunteer Practice: implications for community involvement in invasive species management and policy. *Australian Geographer* 48(3): 333–348. DOI: [10.1080/00049182.2016.1265229](https://doi.org/10.1080/00049182.2016.1265229).
- Axelsson E, Ratnakumar A, Arendt M-L, et al. (2013) The genomic signature of dog domestication reveals adaptation to a starch-rich diet. *Nature* 495(7441): 360–364. DOI: [10.1038/nature11837](https://doi.org/10.1038/nature11837).
- Barua M (2019) Animating capital: Work, commodities, circulation. *Progress in Human Geography* 43(4). SAGE Publications: 650–669. DOI: [10.1177/0309132518819057](https://doi.org/10.1177/0309132518819057).
- Bear C (2021) Making insects tick: Responsibility, attentiveness and care in edible insect farming. *Environment and Planning E: Nature and Space* 4(3): 1010–1030. DOI: [10.1177/2514848620945321](https://doi.org/10.1177/2514848620945321).
- Belcourt B-R (2014) Animal Bodies, Colonial Subjects: (Re)Locating Animality in Decolonial Thought. *Societies* 5(1): 1–11. DOI: [10.3390/soc5010001](https://doi.org/10.3390/soc5010001).
- Blecha J and Davis A (2014) Distance, proximity, and freedom: Identifying conflicting priorities regarding urban backyard livestock slaughter. *Geoforum* 57. Elsevier BV: 67–77. DOI: [10.1016/j.geoforum.2014.08.010](https://doi.org/10.1016/j.geoforum.2014.08.010).
- Bruckner HK (2018) *Beyond happy meat: visceral (dis)connections to animals in alternative food networks*, PhD Thesis, University of Graz.
- Buff PR, Carter RA, Bauer JE, et al. (2014) Natural pet food: A review of natural diets and their impact on canine and feline physiology. *Journal of Animal Science* 92(9): 3781–3791. DOI: [10.2527/jas.2014-7789](https://doi.org/10.2527/jas.2014-7789).

- Carter RA, Bauer JE, Kersey JH, et al. (2014) Awareness and evaluation of natural pet food products in the United States. *Journal of the American Veterinary Medical Association* 245(11): 1241–1248. DOI: [10.2460/javma.245.11.1241](https://doi.org/10.2460/javma.245.11.1241).
- Castrica M, Tedesco D, Panseri S, et al. (2018) Pet Food as the Most Concrete Strategy for Using Food Waste as Feedstuff within the European Context: A Feasibility Study. *Sustainability* 10(6): 2035. DOI: [10.3390/su10062035](https://doi.org/10.3390/su10062035).
- Cole M (2011) From “Animal Machines” to “Happy Meat”? Foucault’s Ideas of Disciplinary and Pastoral Power Applied to ‘Animal-Centred’ Welfare Discourse. *Animals* 1(1). MDPI AG: 83–101. DOI: [10.3390/ani1010083](https://doi.org/10.3390/ani1010083).
- Collard R-C and Dempsey J (2013) Life for Sale? The Politics of Lively Commodities. *Environment and Planning A: Economy and Space* 45(11). SAGE Publications Ltd: 2682–2699. DOI: [10.1068/a45692](https://doi.org/10.1068/a45692).
- Cook I and Crang P (1996) The World On a Plate. *Journal of Material Culture* 1(2). SAGE Publications: 131–153. DOI: [10.1177/135918359600100201](https://doi.org/10.1177/135918359600100201).
- Crowley SL, Hinchliffe S and McDonald RA (2018) Killing squirrels: Exploring motivations and practices of lethal wildlife management. *Environment and Planning E: Nature and Space* 1(1–2): 120–143. DOI: [10.1177/2514848617747831](https://doi.org/10.1177/2514848617747831).
- De Silva SS and Turchini GM (2008) Towards Understanding the Impacts of the Pet Food Industry on World Fish and Seafood Supplies. *Journal of Agricultural and Environmental Ethics* 21(5): 459–467. DOI: [10.1007/s10806-008-9109-6](https://doi.org/10.1007/s10806-008-9109-6).
- Despret V, Buchanan B and Latour B (2016) *What Would Animals Say If We Asked the Right Questions?* Posthumanities 38. Minneapolis: University of Minnesota Press.
- Dodd S, Cave N, Abood S, et al. (2020) An observational study of pet feeding practices and how these have changed between 2008 and 2018. *Veterinary Record* 186(19): 643–643. DOI: [10.1136/vr.105828](https://doi.org/10.1136/vr.105828).
- Dog Food Guru (2014) What is the Whole Prey Diet? In: *Dog Food Guru*. Available at: <https://dogfood.guru/whole-prey-diet/> (accessed 3 April 2022).
- Dutkiewicz J (2018) Transparency and the Factory Farm: Agritourism and Counter-Activism at Fair Oaks Farms. *Gastronomica* 18(2): 19–32. DOI: [10.1525/gfc.2018.18.2.19](https://doi.org/10.1525/gfc.2018.18.2.19).
- Evans AB and Miele M (2012) Between Food and Flesh: How Animals are Made to Matter (and Not Matter) within Food Consumption Practices. *Environment and Planning D: Society and Space* 30(2). SAGE Publications: 298–314. DOI: [10.1068/d12810](https://doi.org/10.1068/d12810).
- Evans AB and Miele M (2019) Enacting public understandings: The case of farm animal welfare. *Geoforum* 99. Elsevier BV: 1–10. DOI: [10.1016/j.geoforum.2018.12.013](https://doi.org/10.1016/j.geoforum.2018.12.013).
- Fortune Business Insights (2022) The global pet food market is projected to grow from USD 115.50 billion in 2022 to USD 163.70 billion by 2029. Available at: <https://www.fortunebusinessinsights.com/industry-reports/pet-food-market-100554>.
- Friedrich B (2015) When the Regulators Refuse to Regulate: Pervasive USDA Underenforcement of the Humane Slaughter Act. *THE GEORGETOWN LAW JOURNAL* 104(1): 33.
- Galt RE (2017) Alternative Food Movement. *International Encyclopedia of Geography: People, the Earth, Environment and Technology*. John Wiley & Sons, Ltd: 1–7. DOI: [10.1002/9781118786352.wbieg0427](https://doi.org/10.1002/9781118786352.wbieg0427).

- Gibbs L (2020) Animal geographies II: Killing and caring (in times of crisis). *Progress in Human Geography*: 030913252094229. DOI: [10.1177/0309132520942295](https://doi.org/10.1177/0309132520942295).
- Gillespie K (2011) How Happy is Your Meat? Confronting (Dis)connectedness in the 'Alternative' Meat Industry. *The Brock Review* 12(1): 100–128. DOI: [10.26522/br.v12i1.326](https://doi.org/10.26522/br.v12i1.326).
- Gillespie K and Lawson V (2017) 'My Dog is My Home': multispecies care and poverty politics in Los Angeles, California and Austin, Texas. *Gender, Place & Culture* 24(6): 774–793. DOI: [10.1080/0966369X.2017.1339021](https://doi.org/10.1080/0966369X.2017.1339021).
- Global Animal Partnership (2022) globalanimalpartnership.org [accessed June 2021 and September 2022]
- Global Animal Partnership (GAP) standards (2022) Broiler chicken welfare Standards.
- Goodman MK (2004) Reading fair trade: political ecological imaginary and the moral economy of fair trade foods. *Political Geography* 23(7): 891–915. DOI: [10.1016/j.polgeo.2004.05.013](https://doi.org/10.1016/j.polgeo.2004.05.013).
- Guthman J (2004) Back to the Land: The Paradox of Organic Food Standards. *Environment and Planning A: Economy and Space* 36(3). SAGE Publications: 511–528. DOI: [10.1068/a36104](https://doi.org/10.1068/a36104).
- Guthman J (2006) Neoliberalism and the making of food politics in California. *Geoforum* 39(3). Elsevier BV: 1171–1183. DOI: [10.1016/j.geoforum.2006.09.002](https://doi.org/10.1016/j.geoforum.2006.09.002).
- Guthman J (2008) Bringing good food to others: investigating the subjects of alternative food practice. *cultural geographies* 15(4): 431–447. DOI: [10.1177/1474474008094315](https://doi.org/10.1177/1474474008094315).
- Haraway DJ (2008) *When Species Meet*. Posthumanities 3. Minneapolis: University of Minnesota Press.
- Hartwick E (1998) Geographies of Consumption: A Commodity-Chain Approach. *Environment and Planning D: Society and Space* 16(4). SAGE Publications: 423–437. DOI: [10.1068/d160423](https://doi.org/10.1068/d160423).
- Heinze CR (n.d.) THEY ARE FEEDING WHAT?! RAW, VEGETARIAN AND VEGAN DIETS.: 4.
- Higa JE, Ruby MB and Rozin P (2021) Americans' acceptance of black soldier fly larvae as food for themselves, their dogs, and farmed animals. *Food Quality and Preference* 90: 104119. DOI: [10.1016/j.foodqual.2020.104119](https://doi.org/10.1016/j.foodqual.2020.104119).
- Higgin M, Evans A and Miele M (2011) A Good Kill: Socio-Technical Organizations of Farm Animal Slaughter. In: Carter B and Charles N (eds) *Human and Other Animals*. London: Palgrave Macmillan UK, pp. 173–194. DOI: [10.1057/9780230321366_9](https://doi.org/10.1057/9780230321366_9).
- Hobbs L and Shanoyan A (2018) Analysis of Consumer Perception of Product Attributes in Pet Food: Implications for Marketing and Brand Strategy. In: *2018 Agricultural & Applied Economics Association Annual Meeting*, Washington, D.C., August 5-August 7
- Holbrook MB (2008) Pets and people: Companions in commerce? *Journal of Business Research* 61(5): 546–552. DOI: [10.1016/j.jbusres.2007.07.010](https://doi.org/10.1016/j.jbusres.2007.07.010).
- Holloway L, Mahon N, Clark B, et al. (2022) Living with cows, sheep and endemic disease in the North of England: Embodied care, biosocial collectivities and killability. *Environment and Planning E: Nature and Space*: 251484862211058. DOI: [10.1177/25148486221105878](https://doi.org/10.1177/25148486221105878).
- Hovorka AJ (2019) Animal geographies III: Species relations of power. *Progress in Human Geography* 43(4). SAGE Publications: 749–757. DOI: [10.1177/0309132518775837](https://doi.org/10.1177/0309132518775837).

- Irvine L (2013) Animals as Lifechangers and Lifesavers: Pets in the Redemption Narratives of Homeless People. *Journal of Contemporary Ethnography* 42(1): 3–30. DOI: [10.1177/0891241612456550](https://doi.org/10.1177/0891241612456550).
- Kamleh M, Khosa DK, Verbrugghe A, et al. (2020) A cross-sectional study of pet owners' attitudes and intentions towards nutritional guidance received from veterinarians. *Veterinary Record* 187(12). Wiley: e123–e123. DOI: [10.1136/vr.105604](https://doi.org/10.1136/vr.105604).
- Kelly RE (2012) *FEEDING THE MODERN DOG: AN EXAMINATION OF THE HISTORY OF THE COMMERCIAL DOG FOOD INDUSTRY AND POPULAR PERCEPTIONS OF CANINE DIETARY PATTERNS*, Masters Thesis, University of Michigan, USA.
- Liu R and Fangqing W (2007) Recall update: the scene from China, *Pet Food Industry*, June.
- Lorimer (n.d.) Charisma. In: *The Multispecies Salon*. Available at: <https://www.multispecies-salon.org/charisma/> (accessed 10 March 2022).
- Lorimer J (2007) Nonhuman Charisma. *Environment and Planning D: Society and Space* 25(5): 911–932. DOI: [10.1068/d71j](https://doi.org/10.1068/d71j).
- Lyon S, Bezaury JA and Mutersbaugh T (2010) Gender equity in fairtrade–organic coffee producer organizations: Cases from Mesoamerica. *Geoforum* 41(1): 93–103. DOI: [10.1016/j.geoforum.2009.04.006](https://doi.org/10.1016/j.geoforum.2009.04.006).
- Lyon S, Mutersbaugh T and Worthen H (2019) Constructing the female coffee farmer: Do corporate smart-economic initiatives promote gender equity within agricultural value chains?: Constructing the Female Coffee Farmer. *Economic Anthropology* 6(1): 34–47. DOI: [10.1002/sea2.12129](https://doi.org/10.1002/sea2.12129).
- Mandell I, Karrow N, Tulpan D, et al. (2020) *Final Research Results Report Prepared for Global Animal Partnership Prepared July 23, 2020*. University of Guelph, Canada.
- McClintock N (2018) Urban agriculture, racial capitalism, and resistance in the settler-colonial city. *Geography Compass* 12(6): e12373. DOI: [10.1111/gec3.12373](https://doi.org/10.1111/gec3.12373).
- Miele M (2011) The Taste of Happiness: Free-Range Chicken. *Environment and Planning A: Economy and Space* 43(9). SAGE Publications: 2076–2090. DOI: [10.1068/a43257](https://doi.org/10.1068/a43257).
- Miele M and Evans A (2010) When foods become animals: Ruminations on Ethics and Responsibility in Care-fullpractices of consumption. *Ethics, Place & Environment* 13(2). Informa UK Limited: 171–190. DOI: [10.1080/13668791003778842](https://doi.org/10.1080/13668791003778842).
- Mutersbaugh T (2005) Just-in-space: Certified rural products, labor of quality, and regulatory spaces. *Journal of Rural Studies* 21(4): 389–402.
- Nast H (2006) Critical Pet Studies? *Antipode* 38(5): 894–906. DOI: [10.1111/j.1467-8330.2006.00484.x](https://doi.org/10.1111/j.1467-8330.2006.00484.x).
- Nast HJ (2006) Loving....Whatever: Alienation, Neoliberalism and Pet-Love in the Twenty-First Century. *Acme* 5(2): 28.
- Nestle M (2008) *Pet Food Politics*. University of California Press. Available at: <http://www.myilibrary.com?id=236063> (accessed 28 February 2021).
- Okin GS (2017) Environmental impacts of food consumption by dogs and cats. *PLOS ONE* 12(8). Public Library of Science (PLoS): e0181301. DOI: [10.1371/journal.pone.0181301](https://doi.org/10.1371/journal.pone.0181301).
- Open Farm (2022) openfarmpet.com [accessed June 2021, February 2022, September 2022]

- Pachirat T (2013) *Every Twelve Seconds: Industrialized Slaughter and the Politics of Sight*. Yale agrarian studies series. New Haven, Conn.: Yale Univ. Press.
- Parreñas JS (2018) *Decolonizing Extinction: The Work of Care in Orangutan Rehabilitation*. Experimental futures : technological lives, scientific arts, anthropological voices. Durham: Duke University Press.
- PETA Investigates (2021) Turkeys Kicked, Beaten, and Killed at ‘Humane’ Farms. In: *PETA Exposés and Undercover Investigations*. Available at: <https://investigations.peta.org/turkey-abuse-humane-farms/> (accessed 4 April 2022).
- Pirsich W and Theuvsen L (2017) The Pet Food Industry: An Innovative Distribution Channel for Animal Welfare Meat? *Proceedings in Food System Dynamics*. CentMa, Intern Center for Management, Communication, and Research: 257-268 Pages. DOI: [10.18461/PFSD.2017.1726](https://doi.org/10.18461/PFSD.2017.1726).
- Power N, Melvin J and Mather C (2021) Multispecies hierarchies and capitalist value: Insights from salmon aquaculture. *Environment and Planning E: Nature and Space*: 251484862110606. DOI: [10.1177/25148486211060662](https://doi.org/10.1177/25148486211060662).
- PSC (Pet Sustainability Coalition) (2021) The 4-Factor Framework for Sustainable Protein Evaluation in Petfood. Available at: <https://petsustainability.org/portfolio/four-factor-framework-for-sustainable-protein-evaluation/>.
- Reddy, AA (2013) Value Chain Analysis of Dryland Agricultural Commodities, India: *International Crops Research Institute for the Semi-Arid Tropics*.
- Semi-Arid Tropics (ICRISAT). 88 pp
- Rombach M and Dean DL (2021) Just Love Me, Feed Me, Never Leave Me: Understanding Pet Food Anxiety, Feeding and Shopping Behavior of US Pet Owners in Covidian Times. *Animals* 11(11): 3101. DOI: [10.3390/ani11113101](https://doi.org/10.3390/ani11113101).
- Rosa H (2010) *Alienation and Acceleration: Towards a Critical Theory of Late-Modern Temporality*. NSU summertalk v. 3. Malmö: NSU Press.
- Rothgerber H (2013) A meaty matter. Pet diet and the vegetarian’s dilemma. *Appetite* 68. Elsevier BV: 76–82. DOI: [10.1016/j.appet.2013.04.012](https://doi.org/10.1016/j.appet.2013.04.012).
- Schlesinger DP and Joffe DJ (2011) Raw food diets in companion animals: a critical review. *The Canadian Veterinary Journal = La Revue Veterinaire Canadienne* 52(1): 50–54.
- Scollon R (n.d.) Action and text: towards an integrated understanding of the place of text in social (inter)action, mediated discourse analysis and the problem of social action. *CRITICAL DISCOURSE ANALYSIS*: 45.
- Shreck A, Getz C and Feenstra G (2006) Social sustainability, farm labor, and organic agriculture: Findings from an exploratory analysis. *Agriculture and Human Values* 23(4). Springer Science and Business Media LLC: 439–449. DOI: [10.1007/s10460-006-9016-2](https://doi.org/10.1007/s10460-006-9016-2).
- Singh B and Dave N (2015) On the Killing and Killability of Animals: Nonmoral Thoughts for the Anthropology of Ethics. *Comparative Studies of South Asia, Africa and the Middle East* 35(2): 232–245. DOI: [10.1215/1089201x-3139012](https://doi.org/10.1215/1089201x-3139012).
- Slocum R (2007) Whiteness, space and alternative food practice. *Geoforum* 38(3): 520–533. DOI: [10.1016/j.geoforum.2006.10.006](https://doi.org/10.1016/j.geoforum.2006.10.006).

- Spain C, Freund D, Mohan-Gibbons H, et al. (2018) Are They Buying It? United States Consumers' Changing Attitudes toward More Humanely Raised Meat, Eggs, and Dairy. *Animals* 8(8): 128. DOI: [10.3390/ani8080128](https://doi.org/10.3390/ani8080128).
- Srinivasan K (2014) Caring for the Collective: Biopower and Agential Subjectification in Wildlife Conservation. *Environment and Planning D: Society and Space* 32(3). SAGE Publications: 501–517. DOI: [10.1068/d13101p](https://doi.org/10.1068/d13101p).
- Srinivasan K (2019) Remaking more-than-human society: Thought experiments on street dogs as “nature”. *Transactions of the Institute of British Geographers* 44(2). Wiley: 376–391. DOI: [10.1111/tran.12291](https://doi.org/10.1111/tran.12291).
- Stanescu V (2010) Green eggs and ham. *Journal for Critical Animal Studies* 8(1): 8–32.
- Stanescu V (2013) Why “Loving” Animals is Not Enough: A Response to Kathy Rudy, Locavorism, and the Marketing of “Humane” Meat. *The Journal of American Culture* 36(2): 100–110. DOI: [10.1111/jacc.12017](https://doi.org/10.1111/jacc.12017).
- Stanescu V (2019) Selling Eden: Environmentalism, Local Meat, and the Postcommodity Fetish. *American Behavioral Scientist* 63(8): 1120–1136. DOI: [10.1177/0002764219830462](https://doi.org/10.1177/0002764219830462).
- Taylor S (2017) *Beasts of Burden: Animal and Disability Liberation*. New York: New Press.
- Watts D, Little J and Ilbery B (2018) ‘I am pleased to shop somewhere that is fighting the supermarkets a little bit’. A cultural political economy of alternative food networks. *Geoforum* 91: 21–29. DOI: [10.1016/j.geoforum.2018.02.013](https://doi.org/10.1016/j.geoforum.2018.02.013).
- Watts DCH, Ilbery B and Maye D (2005) Making reconnections in agro-food geography: alternative systems of food provision. *Progress in Human Geography* 29(1). SAGE Publications: 22–40. DOI: [10.1191/0309132505ph526oa](https://doi.org/10.1191/0309132505ph526oa).
- Wrye J (2015) Animality, affect, and killability in Commercial Pet Foods. In: *ECONOMIES OF DEATH: Economic Logics of Killable Life and Grievable Death*. S.I.: ROUTLEDGE, p. 21.